

**JAMMU & KASHMIR PUBLIC SERVICE COMMISSION**  
Resham Ghar Colony, Bakshi Nagar, Jammu-180001

**Subject:** Filling up of posts of Assistant Director, Fire & Emergency Services

**Notification No. PSC/Exam/06/2019**  
**Dated: 18.01.2019**

In continuation of Notification No. 12-PSC(DR-P) of 2017 dated:27.11.2017, it is hereby informed that the Written Test, consisting of one paper of 120 Objective Type (multiple choice questions), shall be held on 9<sup>th</sup> March, 2019. The duration of the examination shall be two hours.

The syllabus of the examination is forming **Annexure-A**.

It is further informed that:

1. only those candidates shall appear in the Written Test, who fulfil the eligibility conditions prescribed for the post as mentioned in the notification.
2. permission to appear in the Written Test shall be provisional, subject to further verification of documents at any stage of the selection process.
3. the candidature of such candidates who are found to be not fulfilling the eligibility conditions or having misrepresented or concealed the material facts having a bearing on their eligibility shall be summarily rejected.

(Khalid Majeed) **KAS**  
Controller of Examinations  
J&K Public Service Commission

No: PSC/DR/ADFES/2008

Dated:18.01.2019

Copy to the:-

1. Principal/Secretary to the Government, Home Department, Civil Secretariat, Jammu
2. Director, Information & Public Relation, Department of Information & Public Relation, J&K Govt., Jammu with the request to publish the notification in the leading local dailies of Srinagar/Jammu.
3. General Manager, Govt. Press, Jammu/Srinagar for publication of notification in the extra ordinary issue of the Govt. Gazzette
4. Private Secretary to Chairman, J&K Public Service Commission for information of the Hon<sup>ble</sup> Chairman.
5. Private Secretary to Member for information of \_\_\_\_\_, Hon<sup>ble</sup> Member.
6. PA to Secretary, J&K Public Service Commission for information.
7. In-charge website, J&K Public Service Commission.

## **Annexure-A**

Statics: Simple applications of equilibrium equations.

Dynamics: Simple applications of equations of motion, simple harmonic motion, work energy, power.

Theory of Machines: Simple examples of links and mechanism. Classification of gears, standard gear tooth profiles, Classification of bearing. Function of fly wheel. Types of governors. Statics and dynamic balancing. Simple examples of vibration of bars. Whirling of shafts.

Mechanics of solids : Stress, strain, Hook's Law, elastic moduli, Bending moments and shearing force diagrams for beams. Simple bending and torsion of beams springs, thin walled cylinders Mechanical properties and material testing.

Manufacturing Science: Mechanics of metal cutting, tool life, economics of machining, cutting tool materials. Basic machining processes, types of machine tools, transfer lines, shearing, drawing, spinning, rolling, forging, extrusion. Different types of casting and welding methods.

Production Management: Method and time study, motion economy and work space design, operation and flow process charts. Product design and cost selection of manufacturing process. Break even analysis, Site selection, plant layout, Materials handling, selection of equipment for job, shop and mass production, Scheduling, despatching routing.

Thermodynamics: Heat, work and temperature, First and second laws of thermodynamics, Carnot, Rankine, Otto and Diesel Cycles.

Fluid Mechanics: Hydrostatics Continuity equation. Bernoulli's theorem. Flow through pipes. Discharge measurement. Laminar and Turbulent flow, concept of boundary layer.

Heat Transfer: Heat transfer by Conduction, Convection and Radiation. One dimensional steady state conduction through walls and cylinders. Fins, Concept of thermal boundary layer. Heat transfer, coefficient, Combined heat transfer, coefficient, Heat exchangers.

Energy Conversion: Compression and spark ignition engines, Compressors, fans and blowers. Hydraulic pumps and turbines Thermal turbo machines.

Boiler Flow of steam through nozzles layout of power plants.

Environmental Control Refrigeration cycles, refrigeration equipment—its operation and maintenance, important refrigerants, Psychometrics comfort, cooling and dehumidification.